



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,922	09/30/1999	RANDALL BAIRD	2705-70	6051
20575	7590	07/27/2005	EXAMINER	
MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			NGUYEN, TOAN D	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/409,922

Applicant(s)

BAIRD ET AL.

Examiner

Toan D. Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 and 38-73 is/are rejected.
- 7) ☒ Claim(s) 37 and 74 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6, 10-11, 17, 20, 22 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (Session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971).

For claims 1, 3-5, 10 and 11, Auerbach et al disclose session manager, comprising the steps of:

communicating, over a number of sessions smaller than the plurality of call signaling connections, the signaling content of the call signaling connections from the

Art Unit: 2665

signaling gateway to a primary media gateway controller (page 3, section 1.1, lines 13-16); and

routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller (page 3, section 1.1, lines 13-16).

Auerbach et al disclose a plurality of call signaling connections (page 3 lines 13-15). However, Auerbach et al do not expressly disclose terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched. In an analogous art, Osman et al disclose terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 lines 30-33).

Osman et al disclose further comprising the step of interpreting, at the media gateway controller, the signaling content (col. 12 lines 33-37 as set forth in claim 3); further comprising the step of issuing gateway control commands, from the media gateway controller to the media endpoint, based on the signaling content (col. 12 lines 33-37 as set forth in claim 4); wherein the media gateway controller (figure 1, references 56 and 58) similarly controls multiple media endpoints (figure 1, references 22, 24 and 26) and similarly communicates with multiple signaling gateways (col. 4 lines 21-30 as set forth in claim 5); wherein the media endpoint is a media gateway (col. 12 lines 30-33

as set forth in claim 10); wherein the signaling gateway and the media endpoint co-reside on the same platform (figure 12A, col. 12 lines 20-29 as set forth in claim 11).

One skilled in the art would have recognized terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

For claim 2, Auerbach et al disclose wherein the smaller number of sessions is one session (page 3 lines 13-16).

For claim 6, Auerbach et al disclose wherein the routing step routes some of the packet switched bearer streams to one of the multiple media endpoints, and some others of the packet-switched bearer streams to another of the multiple media endpoints (page 3, section 1.1, lines 13-16).

For claim 17, Auerbach et al disclose the steps of:

periodically saving call state information for the calls served by the primary media gateway controller to a failover media gateway controller; and upon the occurrence of a failure at the media gateway controller, failing over to the failover media gateway

controller both control of the media endpoint and communication with the signaling gateway (page 9 section 3.5 lines 4-16).

For claim 20, Auerbach et al disclose session manager, comprising the steps of: a plurality of call signaling connections (page 3 lines 13-15) and the plurality of packet switched call signaling connections onto a smaller number of packet-switched sessions for transmission to a media gateway controller (page 3, section 1.1, lines 13-16).

However, Auerbach et al do not expressly disclose means for terminating a call signaling connection, each corresponding to one of a plurality of packet-switched calls, where each call signaling connection is packet-switched and means for multiplexing the signaling content received over the plurality of packet switched call signaling connections. In an analogous art, Osman et al disclose means for terminating a call signaling connection, each corresponding to one of a plurality of packet-switched calls, where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 lines 30-33) and means for multiplexing the signaling content received over the plurality of packet switched call signaling connections (col. 12 lines 35-36). Osman et al disclose means for terminating a packet-switched bearer stream associated with one of the packet-switched call signaling connections (col. 12 lines 30-33 as set forth in claim 28); means for receiving gateway control signaling from a media gateway controller; and control means responsive to received gateway control signaling (col. 12 lines 30-37 as set forth in claim 29).

One skilled in the art would have recognized means for terminating a call signaling connection, and would have applied Osman et al's signaling gateway in the IP

Art Unit: 2665

carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

For claim 22, the claim is directed to the same subject matter in claim 2.

Therefore, it is subjected to the same rejection.

For claims 30-31, Auerbach et al disclose session manager, comprising the steps of:

a plurality of packet-switched calls (page 3, section 1.1, lines 13-16); and
means for sending, for signaling content associated with one of the identifiable call signaling connections, gateway control signaling responsive to that signaling content, to a media termination endpoint handling a packet-switched bearer stream associated with that identifiable call-signaling connection (page 3, section 1.1, lines 13-16).

However, Auerbach et al do not disclose:

means for receiving multiplexed signaling content from a signaling gateway and parsing this content into signaling content associated with identifiable call signaling connections. In an analogous art, Osman et al disclose means for receiving multiplexed signaling content from a signaling gateway and parsing this content into

signaling content associated with identifiable call signaling connections (col. 12 lines 30-37).

One skilled in the art would have recognized means for receiving multiplexed signaling content from a signaling gateway, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to send two ADD messages to an originating Media gateway (MG) (col. 12 lines 33-37).

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971) further in view of Chritie, IV (US 6,445,695).

For claims 7-9, Auerbach et al in view of Osman et al do not disclose wherein the media endpoint is a media proxy. In an analogous art, Chritie, IV discloses wherein the media endpoint is a media proxy (figure 1, reference 150, col. 4 line 53). Chritie, IV discloses further comprising the step of forwarding one of the packet-switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (col. 4 lines 53-55 and col. 6 lines 4-6 as set forth in claim 8); further comprising, prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy (col. 5 lines 14-28 as set forth in claim 9).

One skilled in the art would have recognized a media proxy, and would have applied Chrutie, IV's communication over IP network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chrutie, IV's system and method for supporting communications services on behalf of a communications device which cannot provide those services itself in Auerbach et al's session manager with the motivation being to communicate over IP network 100 using the H.323 protocol (col. 4 lines 53-54).

5. Claims 12-16 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (Session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971) further in view of Auerbach et al (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claims 12, 14, 16 and 24-26, Auerbach et al disclose at the media gateway controller, outbound signaling content destined for the packet-switched call signaling connections terminated by the signaling gateway, onto a smaller plurality of sessions with the signaling gateway (page 3 lines 13-15). However, Auerbach et al do not disclose multiplexing, at the media gateway controller. In an analogous art, Osman et al disclose multiplexing, at the media gateway controller (col. 12 lines 33-37); parsing, at the signaling gateway, the outbound signaling content into protocol data units identifiable with their associated call-signaling connections (col. 12 lines 33-37).

One skilled in the art would have recognized multiplexing, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2665

time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to send two ADD messages to an originating Media Gateway (MG) col. 12 lines 34-35).

Furthermore, Auerbach et al in view of Osman et al do not disclose transmitting each protocol data unit over its associated call-signaling connection, using the native transport protocol appropriate to that signaling connection. In an analogous art, Auerbach et al (Signaling Backhaul Protocol) disclose transmitting each protocol data unit over its associated call-signaling connection, using the native transport protocol appropriate to that signaling connection (page 3 lines 16-25). Auerbach et al (Signaling Backhaul Protocol) disclose wherein the transport protocol utilized for the call-signaling connections comprises UDP (page 4 lines 3-5 as set forth in claims 14, 16 and 24-26).

One skilled in the art would have recognized transmitting each protocol data unit over its associated call-signaling connection, and would have applied Auerbach et al's signaling backhaul in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Auerbach et al's signaling backhaul protocol in Auerbach et al's session manager with the motivation being to provide for signaling protocol delivery from a gateway to a MGC (page 3, section 2.1 lines 31-32).

For claims 13, 15 and 23, Auerbach et al do not disclose wherein the transport protocol utilized for the call-signaling connections comprises TCP. To include TCP

would have been obvious to one of ordinary skill in the art because Auerbach et al disclose the IP network (col. 12 line 28).

For claim 27, the claim is directed to the same subject matter in claim 12. Therefore, it is subjected to the same rejection.

6. Claims 18-19, 21, 32-36, 38-43, 47-48 and 55-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (Session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971) further in view of Draft H.323, 30 January 1996, Telecommunication Standardization Sector of ITU (ITU-T).

For claim 18, Auerbach et al in view of Osman et al do not disclose wherein one of the packet-switched bearer streams is an audio stream. In an analogous art, Draft H.323 discloses wherein one of the packet-switched bearer streams is an audio stream (page ii lines 1-3). Draft H.323 discloses further comprising the step of routing a packet-switched video stream associated with the audio stream to the media endpoint controlled by the media gateway controller (page ii lines 1-3 as set forth in claim 19); wherein the packet switched call signaling connections include H.225 Q.931 connections, H.225 RAS connections, and H.245 connections (page 19 section 6.2.9 lines 20-28 as set forth in claim 21).

One skilled in the art would have recognized the packet-switched bearer streams is an audio stream, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation

being to carry real-time voice, data, and video, or any combination, including video telephony (page ii lines 2-3).

For claims 32 and 35, Auerbach et al disclose session manager, comprising the steps of:

each signaling gateway capable of terminating a plurality of call signaling connections (page 3, section 1.1 lines 13-16) - and the signaling content of the call signaling connections onto a number of sessions smaller than the number of terminated call signaling connections, where each call signaling connection is packet-switched (page 3, section 1.1, lines 13-16)

a plurality of media endpoints, each endpoint capable of terminating a plurality of packet-switched bearer streams (page 3, section 1.1 lines 13-16).

However, Auerbach et al do not expressly disclose:

where each call signaling connection is packet-switched;

a set of one or more primary media gateway controllers, the set of primary media gateway controllers in communication with each of the signaling gateways and each of the media endpoints, the media gateway controllers using multiplexed signaling content received from the plurality of signaling gateways to control operation of the media endpoints. In an analogous art, Osman et al disclose where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 line 30-33);

a set of one or more primary media gateway controllers (figure 1, references 56 and 58), the set of primary media gateway controllers in communication with each of the signaling gateways and each of the media endpoints (figure 1, references 22, 24 and

Art Unit: 2665

26) the media gateway controllers (figure 1, references 56 and 58) using multiplexed signaling content received from the plurality of signaling gateways to control operation of the media endpoints (figure 12A, col. 2 lines 30-37). Osman et al disclose wherein at least one of the signaling gateways co-resides with one of the media endpoints on a common platform (figure 12A, col. 12 lines 20-29 as set forth in claim 35).

One skilled in the art would have recognized where each call signaling connection is packet-switched, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

Furthermore, Auerbach et al in view of Osman et al do not disclose a plurality of signaling gateways. In an analogous art, Draft H.323 discloses a plurality of signaling gateways (figure 6/H.323, page 25 line 3).

One skilled in the art would have recognized a plurality of signaling gateways, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation being to provide the MC may be located within a Gatekeeper, Gateway, terminal, or MCU (page 25 line3).

For claims 33 and 34, the claims are directed to the same subject matter in claim 17. Therefore, they are subjected to the same rejection.

For claim 36, Auerbach et al do not disclose wherein the transport protocol utilized for the call-signaling connections comprises TCP. To include TCP would have been obvious to one of ordinary skill in the art because Auerbach et al disclose the IP network (col. 12 line 28).

For claims 38, 40-42, 47-48 and 55-56, Auerbach et al disclose session manager, comprising the steps of:

communicating, over a number of sessions smaller than the plurality of call signaling connections, the signaling content of the call signaling connections from the signaling gateway to a primary media gateway controller (page 3, section 1.1, lines 13-16); and

routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller (page 3, section 1.1, lines 13-16).

Auerbach et al disclose a plurality of call signaling connections (page 3 lines 13-15). However, Auerbach et al do not expressly disclose terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched. In an analogous art, Osman et al disclose terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched

calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 lines 30-33).

Osman et al disclose further comprising the step of interpreting, at the media gateway controller, the signaling content (col. 12 lines 33-37 as set forth in claim 40); further comprising the step of issuing gateway control commands, from the media gateway controller to the media endpoint, based on the signaling content (col. 12 lines 33-37 as set forth in claim 41); wherein the media gateway controller (figure 1, references 56 and 58) similarly controls multiple media endpoints (figure 1, references 22, 24 and 26) and similarly communicates with multiple signaling gateways (col. 4 lines 21-30 as set forth in claim 42); wherein the media endpoint is a media gateway (col. 12 lines 30-33 as set forth in claim 47); wherein the signaling gateway and the media endpoint co-reside on the same platform (figure 12A, col. 12 lines 20-29 as set forth in claim 48).

One skilled in the art would have recognized terminating a packet-switch call signaling connections, each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the

motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

Furthermore, Auerbach et al in view of Osman et al do not disclose wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to a primary media gateway controller. In an analogous art, Draft H.323 discloses wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to a primary media gateway controller (page 20 section 6.3 line 12 to page 21 line 3). Draft H.323 discloses wherein one of the packet-switched bearer streams is an audio stream (page ii lines 1-3 as set forth in claim 55); the step of routing a packetswitched video stream associated with the audio stream to the media endpoint controlled by the media gateway controller (page ii lines 1-3 as set forth in claim 56).

One skilled in the art would have recognized wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to a primary media gateway controller, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation being provide gateway characteristic (page 20, section 6.3 line 12).

For claim 39, Auerbach et al disclose wherein the smaller number of sessions is one session (page 3 lines 13-16).

For claim 43, Auerbach et al disclose wherein the routing step routes some of the packet switched bearer streams to one of the multiple media endpoints, and some others of the packet-switched bearer streams to another of the multiple media endpoints (page 3, section 1.1, lines 13-16).

For claims 57 and 65-66, Auerbach et al disclose session manager, comprising the steps of:

a plurality of call signaling connections (page 3 lines 13-15) and the plurality of packet switched call signaling connections onto a smaller number of packet-switched sessions for transmission to a media gateway controller (page 3, section 1.1, lines 13-16).

However, Auerbach et al do not expressly disclose means for terminating a call signaling connection, each corresponding to one of a plurality of packet-switched calls, where each call signaling connection is packet-switched and means for multiplexing the signaling content received over the plurality of packet switched call signaling connections. In an analogous art, Osman et al disclose means for terminating a call signaling connection, each corresponding to one of a plurality of packet-switched calls, where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 lines 30-33) and means for multiplexing the signaling content received over the plurality of packet switched call signaling connections (col. 12 lines 35-36). Osman et al disclose means for terminating a packet-switched bearer stream associated with one of the packet-switched call signaling connections (col. 12 lines 30-33 as set forth in claim 65); means for receiving gateway control signaling from a media gateway

Art Unit: 2665

controller; and control means responsive to received gateway control signaling (col. 12 lines 30-37 as set forth in claim 66).

One skilled in the art would have recognized means for terminating a call signaling connection, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

Furthermore, Auerbach et al in view of Osman et al do not disclose transmission over an H.323 backhaul channel to a media gateway controller. In an analogous art, Draft H.323 discloses transmission over an H.323 backhaul channel to a media gateway controller (page 20 section 6.3 line 12 to page 21 line 3).

One skilled in the art would have recognized transmission over an H.323 backhaul channel to a media gateway controller, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation being provide gateway characteristic (page 20, section 6.3 line 12).

For claim 58, the claim is directed to the same subject matter in claim 21. Therefore, it is subjected to the same rejection.

For claim 59, the claim is directed to the same subject matter in claim 22.

Therefore, it is subjected to the same rejection.

For claim 60, the claim is directed to the same subject matter in claim 23.

Therefore, it is subjected to the same rejection.

For claim 61, the claim is directed to the same subject matter in claim 24.

Therefore, it is subjected to the same rejection.

For claim 62, the claim is directed to the same subject matter in claim 25.

Therefore, it is subjected to the same rejection.

For claim 63, the claim is directed to the same subject matter in claim 26.

Therefore, it is subjected to the same rejection.

For claim 64, the claim is directed to the same subject matter in claim 27.

Therefore, it is subjected to the same rejection.

For claims 67-68, Auerbach et al disclose session manager, comprising the steps of:

a plurality of packet-switched calls (page 3, section 1.1, lines 13-16); and
means for sending, for signaling content associated with one of the identifiable call signaling connections, gateway control signaling responsive to that signaling content, to a media termination endpoint handling a packet-switched bearer stream associated with that identifiable call-signaling connection (page 3, section 1.1, lines 13-16).

However, Auerbach et al do not disclose:

means for receiving multiplexed signaling content from a signaling gateway and

parsing this content into signaling content associated with identifiable call signaling connections. In an analogous art, Osman et al disclose means for receiving multiplexed signaling content from a signaling gateway and parsing this content into signaling content associated with identifiable call signaling connections (col. 12 lines 30-37).

One skilled in the art would have recognized means for receiving multiplexed signaling content from a signaling gateway, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to send two ADD messages to an originating Media gateway (MG) (col. 12 lines 33-37).

Furthermore, Auerbach et al in view of Osman et al do not disclose an H.323 backhaul channel from a signaling gateway. In an analogous art, Draft H.323 discloses an H.323 backhaul channel from a signaling gateway (page 20 section 6.3 line 12 to page 21 line 3).

One skilled in the art would have recognized an H.323 backhaul channel from a signaling gateway, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation being provide gateway characteristic (page 20, section 6.3 line 12).

For claim 69, Auerbach et al disclose session manager, comprising the steps of:
each signaling gateway capable of terminating a plurality of call signaling connections (page 3, section 1.1 lines 13-16) - and the signaling content of the call signaling connections onto a number of sessions smaller than the number of terminated call signaling connections, where each call signaling connection is packet-switched (page 3, section 1.1, lines 13-16)

a plurality of media endpoints, each endpoint capable of terminating a plurality of packet-switched bearer streams (page 3, section 1.1 lines 13-16).

However, Auerbach et al do not expressly disclose:

where each call signaling connection is packet-switched;

a set of one or more primary media gateway controllers, the set of primary media gateway controllers in communication with each of the signaling gateways and each of the media endpoints, the media gateway controllers using multiplexed signaling content received from the plurality of signaling gateways to control operation of the media endpoints. In an analogous art, Osman et al disclose where each call signaling connection is packet-switched (figure 12A, reference step 304, col. 12 line 30-33);

a set of one or more primary media gateway controllers (figure 1, references 56 and 58), the set of primary media gateway controllers in communication with each of the signaling gateways and each of the media endpoints (figure 1, references 22, 24 and 26) the media gateway controllers (figure 1, references 56 and 58) using multiplexed signaling content received from the plurality of signaling gateways to control operation of the media endpoints (figure 12A, col. 2 lines 30-37).

One skilled in the art would have recognized where each call signaling connection is packet-switched, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network functionality in Auerbach et al's session manager with the motivation being to encapsulates the IAM in an IP packet and sends it to an originating Media Gateway Controller (MGC) (col. 12 lines 30-33).

Furthermore, Auerbach et al in view of Osman et al do not disclose a plurality of signaling gateways. In an analogous art, Draft H.323 discloses a plurality of signaling gateways (figure 6/H.323, page 25 line 3), and H.323 backhaul channels (page 20 section 6.3 line 12 to page 21 line 3).

One skilled in the art would have recognized a plurality of signaling gateways, and would have applied Draft H.323 in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Draft H.323 in Auerbach et al's session manager with the motivation being to provide the MC may be located within a Gatekeeper, Gateway, terminal, or MCU (page 25 line3).

For claim 70, the claim is directed to the same subject matter in claim 33. Therefore, it is subjected to the same rejection.

For claim 71, the claim is directed to the same subject matter in claim 34. Therefore, it is subjected to the same rejection.

For claim 72, the claim is directed to the same subject matter in claim 35.
Therefore, it is subjected to the same rejection.

For claim 73, the claim is directed to the same subject matter in claim 36.
Therefore, it is subjected to the same rejection.

7. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971) in view of Draft H.323, 30 January 1996, Telecommunication Standardization Sector of ITU (ITU-T) further in view of Chritie, IV (US 6,445,695).

For claims 44-46, Auerbach et al in view of Osman et al and Draft H.323 do not disclose wherein the media endpoint is a media proxy. In an analogous art, Chritie, IV discloses wherein the media endpoint is a media proxy (figure 1, reference 150, col. 4 line 53). Chritie, IV discloses further comprising the step of forwarding one of the packet-switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (col. 4 lines 53-55 and col. 6 lines 4-6 as set forth in claim 45); further comprising, prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy (col. 5 lines 14-28 as set forth in claim 46).

One skilled in the art would have recognized a media proxy, and would have applied Chritie, IV's communication over IP network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chritie, IV's system and method for supporting communications

Art Unit: 2665

services on behalf of a communications device which cannot provide those services itself in Auerbach et al's session manager with the motivation being to communicate over IP network 100 using the H.323 protocol (col. 4 lines 53-54).

8. Claims 49, 51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al (Session Manager, 25 February 1999, Internet Draft) in view of Osman et al (US 6,791,971) in view of Draft H.323, 30 January 1996, Telecommunication Standardization Sector of ITU (ITU-T) further in view of Auerbach et al (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claims 49, 51 and 53, Auerbach et al disclose at the media gateway controller, outbound signaling content destined for the packet-switched call signaling connections terminated by the signaling gateway, onto a smaller plurality of sessions with the signaling gateway (page 3 lines 13-15). However, Auerbach et al do not disclose multiplexing, at the media gateway controller. In an analogous art, Osman et al disclose multiplexing, at the media gateway controller (col. 12 lines 33-37); parsing, at the signaling gateway, the outbound signaling content into protocol data units identifiable with their associated call-signaling connections (col. 12 lines 33-37).

One skilled in the art would have recognized multiplexing, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al's method and apparatus for providing a communications service, for communication and for extending packet network

functionality in Auerbach et al's session manager with the motivation being to send two ADD messages to an originating Media Gateway (MG) col. 12 lines 34-35).

Furthermore, Auerbach et al in view of Osman et al and Draft H.323 do not disclose transmitting each protocol data unit over its associated call-signaling connection, using the native transport protocol appropriate to that signaling connection. In an analogous art, Auerbach et al (Signaling Backhaul Protocol) disclose transmitting each protocol data unit over its associated call-signaling connection, using the native transport protocol appropriate to that signaling connection (page 3 lines 16-25). Auerbach et al (Signaling Backhaul Protocol) disclose wherein the transport protocol utilized for the call-signaling connections comprises UDP (page 4 lines 3-5 as set forth in claims 51 and 53).

One skilled in the art would have recognized transmitting each protocol data unit over its associated call-signaling connection, and would have applied Auerbach et al's signaling backhaul in Auerbach et al's session. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Auerbach et al's signaling backhaul protocol in Auerbach et al's session manager with the motivation being to provide for signaling protocol delivery from a gateway to a MGC (page 3, section 2.1 lines 31-32).

For claims 50 and 52, Auerbach et al do not disclose wherein the transport protocol utilized for the call-signaling connections comprises TCP. To include TCP would have been obvious to one of ordinary skill in the art because Auerbach et al disclose the IP network (col. 12 line 28).

For claim 54, Auerbach et al disclose the steps of:

periodically saving call state information for the calls served by the primary media gateway controller to a failover media gateway controller; and upon the occurrence of a failure at the media gateway controller, failing over to the failover media gateway controller both control of the media endpoint and communication with the signaling gateway (page 9 section 3.5 lines 4-16).

Allowable Subject Matter

9. Claims 37 and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments with respect to claims 1-74 have been considered but are moot in view of the new ground(s) of rejection.

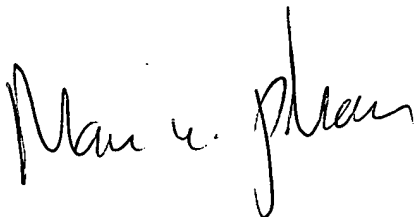
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
TN



MAN U. PHAN
PRIMARY EXAMINER